

Appl. No. 10/758,218

Reply to Official Action mailed on 10/25/2006

Listing of Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (currently amended) A baggage handling unit for retrofitting an existing passenger boarding bridge having [[a]] an existing foundation that is formed within a portion of the apron surface below the passenger boarding bridge, the existing foundation including a plurality of studs protruding therefrom, the baggage handling unit comprising:

a walkway for coupling a terminal building access port and a rotunda of an existing passenger boarding bridge so as to support passenger movement therebetween, the walkway including a baggage access port;

a support including a mounting end configured for engaging the plurality of studs protruding from the existing foundation and a support end for supporting the rotunda of the existing passenger boarding bridge at a position that is horizontally displaced from the existing foundation;

a baggage elevating element mounted adjacent to the baggage access port of the walkway, the baggage elevating element including a controllable baggage lift mechanism and a baggage enclosure, the controllable baggage lift mechanism coupled to the baggage enclosure for controllably raising and lowering the baggage enclosure between an upper station adjacent to the access port of the walkway and a lower station at a height that is disposed elevationally below the access port of the walkway; and,

a mount for fixedly coupling the baggage handling unit to the rotunda about a point opposite an aircraft engaging portion of the existing passenger boarding bridge, such that the baggage handling unit and the rotunda are structurally attached.

Claim 2 (currently amended) A baggage handling unit according to claim 1, wherein the baggage handling unit is for, in use, counterbalancing the aircraft engaging portion of the existing passenger boarding bridge such that a moment imposed from the baggage handling unit to the existing foundation is at least partially compensated.

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Claim 3 (currently amended) A baggage handling unit according to claim 1, wherein a portion of the baggage handling unit is cantilevered off the existing foundation when the baggage handling unit is in an installed condition on the existing foundation.

Claim 4 (currently amended) A baggage handling unit according to claim 1, comprising a counter-weight mounted to the baggage handling unit for at least partially counterbalancing the aircraft engaging portion of the existing passenger boarding bridge such that a moment imposed from the baggage handling unit to the existing foundation is at least partially compensated.

Claim 5 (currently amended) A baggage handling unit according to claim 1, wherein the mounting end of said support comprises a mounting plate having a plurality of holes formed therethrough for receiving the [[a]] plurality of studs protruding from arranged along the existing foundation.

Claim 6 (currently amended) A baggage handling unit according to claim 5, wherein the plurality of holes formed through the mounting plate is for receiving [[a]] the plurality of studs protruding from arranged along the existing foundation in an industry standard number 7 bolt pattern.

Claims 7-8 (cancelled).

Claim 9 (currently amended) A baggage handling unit according to claim 1 [[8]], wherein the controllable baggage lift mechanism comprises a winch and cable mechanism.

Claim 10 (currently amended) A baggage handling unit according to claim 1 [[8]], wherein the controllable baggage lift mechanism comprises a fluid pressure operated ram mechanism.

Claim 11 (currently amended) A baggage handling unit according to claim 1 [[8]], comprising a controller for controlling the controllable baggage lift mechanism.

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Claim 12 (original) A baggage handling unit according to claim 11, wherein the controller comprises a pushbutton station located proximate the lower station.

Claim 13 (currently amended) A baggage handling unit according to claim 1, wherein the walkway comprises a controllably movable barrier for preventing persons or objects from falling through the access port of the walkway when the baggage enclosure is lowered to ~~[[a]] the lower station at a height that is elevationally below the access port of the walkway.~~

Claim 14 (original) A baggage handling unit according to claim 13, wherein the controllably movable barrier comprises a roll-down door.

Claim 15 (currently amended) A baggage handling unit according to claim 13, comprising a safety mechanism for releasing a lock of the controllably movable barrier in dependence upon the baggage enclosure being secured at ~~[[an]] the~~ upper station adjacent to the access port of the walkway.

Claim 16 (currently amended) A baggage handling unit for retrofitting an existing passenger boarding bridge having ~~[[a]] an existing foundation that is formed within a portion of the apron surface below the passenger boarding bridge. the existing foundation including a plurality of studs protruding therefrom,~~ the baggage handling unit comprising:

- a walkway for coupling a terminal building access port and a rotunda of an existing passenger boarding bridge so as to support passenger movement therebetween, the walkway including a baggage access port;
- a baggage elevating element mounted adjacent to the baggage access port of the walkway, the baggage elevating element including a controllable baggage lift mechanism and a baggage enclosure, the controllable baggage lift mechanism coupled to the baggage enclosure for controllably raising and lowering the baggage enclosure between an upper station adjacent to the access port of the walkway and a lower station at a height that is disposed elevationally below the access port of the walkway;

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a mount for structurally coupling the baggage handling unit to the rotunda opposite an aircraft engaging portion of the existing passenger boarding bridge; and,

a support for mounting the baggage handling unit to the protruding studs of the existing foundation such that the baggage handling unit at least partially counterbalances the aircraft engaging portion of the existing passenger boarding bridge, and such that a moment imposed from the baggage handling unit to the existing foundation is at least partially compensated.

Claim 17 (currently amended) A baggage handling unit according to claim 16, wherein the support is for, in use, supporting the walkway via the existing foundation in a cantilever-like manner such that the baggage handling unit in combination with the aircraft engaging portion of the existing passenger boarding bridge exert a force that is mostly normal to the existing foundation.

Claim 18 (currently amended) A baggage handling unit according to claim 16, comprising a counter-weight mounted to the baggage handling unit for counterbalancing the aircraft engaging portion of the existing passenger boarding bridge such that a moment imposed from the baggage handling unit to the existing foundation is at least partially compensated.

Claim 19 (currently amended) A baggage handling unit according to claim 16, wherein the support includes a mounting plate for engaging a mounting structure of the existing foundation, the mounting structure of the existing foundation comprising the plurality of studs protruding from the existing foundation.

Claim 20 (currently amended) A baggage handling unit according to claim 19, wherein the mounting plate includes a plurality of holes formed therethrough for receiving ~~[[a]]~~ the plurality of studs protruding from ~~arranged along~~ the existing foundation.

Claim 21 (currently amended) A baggage handling unit according to claim 20, wherein the plurality of holes formed through the mounting plate is for receiving ~~[[a]]~~ the plurality of

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studs protruding from ~~arranged along the~~ existing foundation in an industry standard number 7 bolt pattern.

Claim 22 (cancelled).

Claim 23 (currently amended) A baggage handling unit according to claim 16 ~~[[22]]~~, comprising a controller for controlling the controllable baggage lift mechanism.

Claim 24 (original) A baggage handling unit according to claim 16, wherein the walkway comprises a controllably moveable barrier for preventing persons or objects from falling through the access port of the walkway when the baggage enclosure is lowered to a lower station at a height that is elevationally below the access port of the walkway.

Claim 25 (original) A baggage handling unit according to claim 24, wherein the controllably moveable barrier comprises a roll-down door.

Claim 26 (currently amended) A method of retrofitting an existing passenger boarding bridge having ~~[[a]]~~ an existing foundation that is formed within a portion of the apron surface below the passenger boarding bridge, the existing foundation including a plurality of studs protruding therefrom, the method comprising;

providing a baggage handling unit including a support configured for engaging a mounting structure of the existing foundation, the mounting structure of existing foundation including the plurality of studs protruding therefrom, and the baggage handling unit including a mount configured for structurally coupling the baggage handling unit to a rotunda of the existing passenger boarding bridge;

displacing the existing passenger boarding bridge from the existing foundation;
mounting the baggage handling unit to the existing foundation via the support and the mounting structure of the existing foundation; and,

structurally mounting the rotunda of the existing passenger boarding bridge to the baggage handling unit via the mount, such that the rotunda is supported at a position that is horizontally displaced from the existing foundation.

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Claim 27 (original) A method according to claim 26, wherein providing a baggage handling unit comprises providing a pre-assembled unit including a walkway, a baggage elevating element, the support, and the mount.

Claim 28 (currently amended) A method according to claim 26, comprising mounting a counter-weight to the baggage handling unit for counterbalancing an aircraft engaging portion of the existing passenger boarding bridge such that a moment imposed from the baggage handling unit to the existing foundation is at least partially compensated.

Claim 29 (currently amended) A method according to claim 26, wherein displacing the existing passenger boarding bridge comprises disengaging a rotunda column associated with the existing passenger boarding bridge from the mounting structure of the existing foundation.